

WHAT IS CLAIMED IS:

1 1. For use in a radio access network comprising a serving radio network control
2 node and a drift radio network control node, a method comprising:

3 determining that a target cell controlled by the drift radio network control node
4 should be prepared for handover with respect to a user equipment unit, the target cell
5 being neighbored by a set of neighboring cells, the set of neighboring cells including a
6 first subset of neighboring cells and a second subset of neighboring cells, a handover
7 involving the user equipment unit being permitted for a cell of the first subset but not
8 for a cell of the second subset;

9 transmitting to the user equipment unit a message including a filtered list of
10 cells, the filtered list of cells including the first subset but not the second subset.

1 2. The method of claim 1, wherein the filtered list of cells comprises cells for
2 whose channels the user equipment unit is to perform measurements.

1 3. The method of claim 1, further comprising:
2 determining an allowed area(s) for the user equipment unit;
3 preparing the filtered list of cells using the allowed area(s).

1 4. The method of claim 3, further comprising:
2 performing the step of determining the allowed area(s) for the user equipment
3 unit at the drift radio network control node;
4 performing the step of preparing the filtered list of cells using the allowed
5 area(s) at the drift radio network control node.

1 5. The method of claim 4, further comprising:
2 transmitting to the drift radio network control node an identification of the target
3 cell and an identification of the user equipment unit; and
4 the drift radio network control node transmitting to the serving radio network
5 control node the filtered list.

1 6. The method of claim 4, wherein the identification of the user equipment unit
2 is the International Mobile Subscriber Identifier (IMSI) of the user equipment unit.

1 7. The method of claim 5, further comprising:
2 transmitting to the drift radio network control node an identification of the target
3 cell and an identification of the user equipment unit in a RADIO LINK SETUP
4 REQUEST message;
5 transmitting to the serving radio network control node the filtered list in a
6 RADIO LINK SETUP RESPONSE message.

1 8. The method of claim 4, further comprising:
2 performing the step of determining the allowed area(s) for the user equipment
3 unit at the drift radio network control node by consulting a table maintained at the drift
4 radio network control node.

1 9. The method of claim 3, further comprising:
2 performing the step of determining the allowed area(s) for the user equipment
3 unit at the serving radio network control node;
4 performing the step of preparing the filtered list of cells using the allowed
5 area(s) at the drift radio network control node.

1 10. The method of claim 9, further comprising:
2 transmitting to the drift radio network control node an identification of the target
3 cell and a list of allowed area(s) for the user equipment unit; and
4 the drift radio network control node transmitting to the serving radio network
5 control node the filtered list.

1 11. The method of claim 10, wherein the list of allowed area(s) comprises a list
2 of allowed network(s) expressed at least partially in terms of PLMN = MCC/MNC.

1 12. The method of claim 10, further comprising:
2 transmitting to the drift radio network control node the identification of the
3 target cell and the list of allowed area(s) for the user equipment unit in a RADIO LINK
4 SETUP REQUEST message;
5 transmitting to the serving radio network control node the filtered list in a
6 RADIO LINK SETUP RESPONSE message.

1 13. The method of claim 9, further comprising:

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2 performing the step of determining the list of allowed area(s) for the user
3 equipment unit at the serving radio network control node by consulting a table
4 maintained at the serving radio network control node.

1 14. The method of claim 3, further comprising:
2 performing the step of determining the allowed area(s) for the user equipment
3 unit at the serving radio network control node;
4 performing the step of preparing the filtered list of cells using the allowed
5 area(s) at the serving radio network control node.

1 15. The method of claim 14, further comprising:
2 transmitting to the drift radio network control node an identification of the target
3 cell for the user equipment unit; and
4 the drift radio network control node transmitting to the serving radio network
5 control node a list of neighboring cells for the target cell.

1 16. The method of claim 15, further comprising:
2 transmitting to the drift radio network control node the identification of the
3 target cell in a RADIO LINK SETUP REQUEST message;
4 transmitting to the serving radio network control node the list of neighboring
5 cells for the target cell in a RADIO LINK SETUP RESPONSE message.

1 17. The method of claim 14, further comprising:
2 performing the step of determining the allowed area(s) for the user equipment
3 unit at the serving radio network control node by consulting a table maintained at the
4 serving radio network control node.

1 18. The method of claim 3, further comprising:
2 performing the step of determining the allowed area(s) for the user equipment
3 unit at a core network;
4 performing the step of preparing the filtered list of cells using the allowed
5 area(s) at the drift radio network control node.

1 19. The method of claim 18, further comprising determining the list of allowed
2 area(s) for the user equipment unit by consulting a table maintained at a core network
3 node.

1 20. The method of claim 18, wherein the step of determining the allowed area(s)
2 for the user equipment unit at a core network involves consulting a record in a home
3 location register (HLR) for the user equipment unit.

1 21. The method of claim 18, further comprising:
2 transmitting to the drift radio network control node an identification of the target
3 cell and a list of allowed area(s) for the user equipment unit; and
4 the drift radio network control node transmitting to the serving radio network
5 control node the filtered list.

1 22. The method of claim 21, wherein the list of allowed area(s) comprises a list
2 of allowed network(s) expressed at least partially in terms of PLMN = MCC/MNC.

1 23. The method of claim 21, further comprising:
2 transmitting to the drift radio network control node the identification of the
3 target cell and the list of allowed area(s) for the user equipment unit in a RADIO LINK
4 SETUP REQUEST message;
5 transmitting to the serving radio network control node the filtered list in a
6 RADIO LINK SETUP RESPONSE message.

1 24. The method of claim 3, further comprising:
2 performing the step of determining the allowed area(s) for the user equipment
3 unit at a core network;
4 performing the step of preparing the filtered list of cells using the allowed
5 area(s) at the serving radio network control node.

1 25. The method of claim 24, further comprising determining the list of allowed
2 area(s) for the user equipment unit by consulting a table maintained at a core network
3 node.

1 26. The method of claim 24, wherein the step of determining the allowed area(s)
2 for the user equipment unit at a core network involves consulting a record in a home
3 location register (HLR) for the user equipment unit.

1 27. The method of claim 24, further comprising:
2 transmitting to the drift radio network control node an identification of the target
3 cell for the user equipment unit; and
4 the drift radio network control node transmitting to the serving radio network
5 control node a list of neighboring cells for the target cell.

1 28. The method of claim 27, further comprising:
2 transmitting to the drift radio network control node the identification of the
3 target cell in a RADIO LINK SETUP REQUEST message;
4 transmitting to the serving radio network control node the list of neighboring
5 cells for the target cell in a RADIO LINK SETUP RESPONSE message.

1 29. The method of claim 1, wherein the serving radio network control node
2 determines that the target cell controlled by the drift radio network control node should
3 be prepared for handover with respect to the user equipment unit, and wherein the
4 serving radio network control node transmits to the user equipment unit the message
5 including the filtered list of cells.

1 30. The method of claim 1, further comprising transmitting to the user
2 equipment unit the filtered list of cells in a MEASUREMENT CONROL message.

1 31. A radio access network comprising a serving radio network control node
2 and a drift radio network control node, wherein the serving radio network control node
3 determines that a target cell controlled by the drift radio network control node should be
4 prepared for handover with respect to a user equipment unit, the target cell being
5 neighbored by a set of neighboring cells, the set of neighboring cells including a first
6 subset of neighboring cells and a second subset of neighboring cells, a handover
7 involving the user equipment unit being permitted for a cell of the first subset but not
8 for a cell of the second subset; characterized in that:

9 the serving radio network control node transmits to the user equipment unit a
10 message including a filtered list of cells, the filtered list of cells including the first
11 subset but not the second subset.

1 32. The apparatus of claim 31, wherein the filtered list of cells comprises cells
2 for whose channels the user equipment unit is to perform measurements.

1 33. The apparatus of claim 31, wherein the drift radio network control node
2 determines the allowed area(s) for the user equipment unit at the drift radio network
3 control node and prepares the filtered list of cells using the allowed area(s) at the drift
4 radio network control node.

1 34. The apparatus of claim 33, wherein the serving radio network control node
2 transmits to the drift radio network control node an identification of the target cell and
3 an identification of the user equipment unit; and wherein the drift radio network control
4 node transmits to the serving radio network control node the filtered list.

1 35. The apparatus of claim 34, wherein the identification of the user equipment
2 unit is the International Mobile Subscriber Identifier (IMSI) of the user equipment unit.

1 36. The apparatus of claim 34, wherein the serving radio network control node
2 transmits to the drift radio network control node an identification of the target cell and
3 an identification of the user equipment unit in a RADIO LINK SETUP REQUEST
4 message; and wherein the drift radio network control node transmits to the serving
5 radio network control node the filtered list in a RADIO LINK SETUP RESPONSE
6 message.

1 37. The apparatus of claim 33, wherein the drift radio network control node
2 determines the allowed area(s) for the user equipment unit by consulting a table
3 maintained at the drift radio network control node.

1 38. The apparatus of claim 31, wherein the serving radio network control node
2 determines the allowed area(s) for the user equipment unit at the serving radio network
3 control node and the drift radio network control node prepares the filtered list of cells
4 using the allowed area(s).

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1 39. The apparatus of claim 38, wherein the serving radio network control node
2 transmits to the drift radio network control node an identification of the target cell and a
3 list of allowed area(s) for the user equipment unit; and wherein the drift radio network
4 control node transmits to the serving radio network control node the filtered list.

1 40. The apparatus of claim 39, wherein the list of allowed area(s) comprises a
2 list of allowed network(s) expressed at least partially in terms of PLMN = MCC/MNC.

1 41. The apparatus of claim 39, wherein the serving radio network control node
2 transmits to the drift radio network control node the identification of the target cell and
3 the list of allowed area(s) for the user equipment unit in a RADIO LINK SETUP
4 REQUEST message, and wherein the drift radio network control node transmits to the
5 serving radio network control node the filtered list in a RADIO LINK SETUP
6 RESPONSE message.

1 42. The apparatus of claim 38, wherein the serving radio network control node
2 determines the list of allowed area(s) for the user equipment unit at the serving radio
3 network control node by consulting a table maintained at the serving radio network
4 control node.

1 43. The apparatus of claim 31, wherein the serving radio network control node
2 determines the allowed area(s) for the user equipment unit and prepares the filtered list
3 of cells using the allowed area(s).

1 44. The apparatus of claim 43, wherein the serving radio network control node
2 transmits to the drift radio network control node an identification of the target cell for
3 the user equipment unit; and wherein the drift radio network control node transmits to
4 the serving radio network control node a list of neighboring cells for the target cell.

1 45. The apparatus of claim 44, wherein the serving radio network control node
2 transmits to the drift radio network control node the identification of the target cell in a
3 RADIO LINK SETUP REQUEST message; and wherein the drift radio network
4 control node transmits to the serving radio network control node the list of neighboring
5 cells for the target cell in a RADIO LINK SETUP RESPONSE message.

1 46. The apparatus of claim 43, wherein the serving radio network control node
2 determines the allowed area(s) for the user equipment unit by consulting a table
3 maintained at the serving radio network control node.

1 47. The apparatus of claim 31, wherein the serving radio network control node
2 receives from a core network a determination of the allowed area(s) for the user
3 equipment unit at a core network; and wherein the drift radio network control node
4 prepares the filtered list of cells using the allowed area(s).

1 48. The apparatus of claim 47, wherein the core network determines the list of
2 allowed area(s) for the user equipment unit by consulting a table maintained at a core
3 network node.

1 49. The apparatus of claim 47, wherein the core network determines the allowed
2 area(s) for the user equipment unit by consulting a record in a home location register
3 (HLR) for the user equipment unit.

1 50. The apparatus of claim 47, wherein the serving radio network control node
2 transmits to the drift radio network control node an identification of the target cell and a
3 list of allowed area(s) for the user equipment unit; and wherein the drift radio network
4 control node transmits to the serving radio network control node the filtered list.

1 51. The apparatus of claim 50, wherein the list of allowed area(s) comprises a
2 list of allowed network(s) expressed at least partially in terms of PLMN = MCC/MNC.

1 52. The apparatus of claim 50, wherein the serving radio network control node
2 transmits to the drift radio network control node the identification of the target cell and
3 the list of allowed area(s) for the user equipment unit in a RADIO LINK SETUP
4 REQUEST message; and wherein the drift radio network control node transmits to the
5 serving radio network control node the filtered list in a RADIO LINK SETUP
6 RESPONSE message.

1 53. The apparatus of claim 31, wherein the serving radio network control node
2 receives from a core network node a determination of the allowed area(s) for the user

3 equipment unit; and wherein the serving radio network control node prepares the
4 filtered list of cells using the allowed area(s).

1 54. The apparatus of claim 53, wherein the core network makes the
2 determination of the list of allowed area(s) for the user equipment unit by consulting a
3 table maintained at a core network node.

1 55. The apparatus of claim 53, wherein the core network makes the
2 determination of the list of allowed area(s) for the user equipment unit by consulting a
3 record in a home location register (HLR) for the user equipment unit.

1 56. The apparatus of claim 53, wherein the serving radio network control node
2 transmits to the drift radio network control node an identification of the target cell for
3 the user equipment unit; and wherein the drift radio network control node transmits to
4 the serving radio network control node a list of neighboring cells for the target cell.

1 57. The apparatus of claim 56, wherein the serving radio network control node
2 transmits to the drift radio network control node the identification of the target cell in a
3 **RADIO LINK SETUP REQUEST** message; and wherein the drift radio network
4 control node transmits to the serving radio network control node the list of neighboring
5 cells for the target cell in a **RADIO LINK SETUP RESPONSE** message.

1 58. The apparatus of claim 31, wherein the serving radio network control node
2 determines that the target cell controlled by the drift radio network control node should
3 be prepared for handover with respect to the user equipment unit, and wherein the
4 serving radio network control node transmits to the user equipment unit the message
5 including the filtered list of cells.